

THE UCL JAPAN MONUMENT

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IN HONOUR OF
THE PIONEERS WHO CAME
TO UCL IN 1863 AND 1865
AND RETURNED TO LAY
THE FOUNDATIONS OF
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The Historical Background

Japan in the 1850's and early 1860's was a feudal nation ruled from Edo by the Bakufu Government presided over by the Tokugawa Shogunate. During this period, the opening of the ports with the Treaty of 1858 and the subsequent influx of foreign merchants gave rise to the 'Joi' resistance movement among many Japanese determined to protect their national frontier.

Disturbances, arising from the anger of the warrior classes in particular, led to the burning of the British Legation and to the so-called Namamugi Incident in which a samurai of the Satsuma clan murdered a British Shanghai merchant whilst the latter was out riding near Yokohama. As a result, the Royal Navy mounted a punitive expedition and in 1863 carried out the Bombardment of Kagoshima, capital of the Satsuma clan. Since the British Armstrong guns, with their modern shells, substantially outranged the Japanese artillery, much of the city was left in flames.

Kyushu, the south island of Japan had, because of its geographical location, long been the most outward looking part of the country, with extensive interests in overseas trade, illicit or otherwise.

It was in 1863, the year of the bombardment of Kagoshima, that five young nobles from Choshu, another of the great Japanese clans, made contact with the agent of Jardine Matheson, the British trading firm, with a view to journeying to England to learn about the customs and technology of the country which produced such powerful ships and weapons. Unfortunately, owing to a signal failure in communication, they eventually travelled not as distinguished passengers, but as apprentice seamen with all the hardship that that entailed in the 19th century Merchant Navy.

Simultaneously, at the instigation of Tomoatsu Godai, the Satsuma clan, who were, in 1866, to form an alliance with their powerful rivals the Choshu, were also laying plans to send a somewhat larger party to London for the same purpose. Indeed, the Daimyo of the clan, Nariakira Shimazu, an enterprising and progressive leader, had conceived the idea of sending a Satsuma mission to the west as early as 1857.

As a result, in 1865, a party of fourteen young students, some of them in their early teens, accompanied by a superintendent, Hisanari Machida, and a senior member of the clan, Hisanobu Niro, all suitably equipped with pseudonyms, went into hiding in the neighbourhood of the port of Kushikino in order to escape the vigilance of the agents of the Bakufu Government. Some two months later, on the pretext of visiting off-shore islands, they slipped away and managed to join a ship bound for England. On board, they met two other senior members of the clan, Tomoatsu Godai, the moving spirit behind the plan, and Munenori Terashima, together with an interpreter, Takayuki Hori.

On their arrival in London, via Southampton, Hugh Matheson of Jardine Matheson, directed them to UCL, to which the five Choshu noblemen had previously found their way. The earlier group had stayed in the house of Professor Alexander Williamson and four of them had enrolled in his classes in Analytical Chemistry. The new arrivals were also befriended by that remarkable man. His letter to the College Secretary asking special permission for them to be registered is still preserved in the UCL archives.

It was no coincidence that both parties should have been directed towards University College London, the original University of London. That title was only ceded a decade after the foundation of the College in 1826, when Kings College was set up at the instigation of the establishment to counteract the liberalism and, in their view, the pernicious influence of UCL. Indeed, when the first Japanese students arrived, UCL was still the only university institution in England in which both teaching and research were open to all races and religions, and to all social classes regardless of their political persuasions.

The outcome of this first contact between some of the most forward-looking Japanese samurai and the most progressive centre of learning in mid nineteenth century England was spectacular.

Of the five Choshu men who came in 1863, Hirobumi Ito became one of the leading figures in the period of the Meiji Restoration, which was established in 1868 and marked the birth of the new Japan. He was Secretary of State for Internal Affairs (1878-80), and the first Prime Minister of Meiji Japan, a post which he held four times in all (1885-1901).

Kaoru Inoue, the life-long, close friend of Hirobumi Ito, became Under-Secretary of State for Financial Affairs (1871-73), and Secretary of State for Foreign Affairs and later Minister (1879-87). Masaru Inoue, on the other hand, became the founder and first President of the Japanese Board of Railways. A scholarship fund in his name to enable British students to study in Japan was established at UCL in 1984, in accordance with his wishes, by his direct descendant Katsuhide Inoue. The intricate series of relationships and matrimonial links between the Ito and Inoue families provided the background to the formation of the Sumitomo Corporation and of Mitsui & Co which, in 1992, ranked first and third in the list of one hundred leading Japanese companies.

Yozo Yamao, after staying at UCL until 1866, went to Glasgow to enrol in Anderson's College, a forerunner of Strathclyde University, and worked as an apprentice in the Glasgow shipyards. On his return to Japan, he rapidly rose to be Secretary of State in the Ministry of Industries and was instrumental in laying the structural framework for Japan's technological revolution. He was also active in setting up a governmental system of education for the blind and the deaf as a result of his experience of the deaf using sign language in the Glasgow Shipyards.

The other member of the Choshu party, Kinsuke Endo, became director of the Mint Bureau in Osaka, and is remembered for creating in the grounds the famous Sakura Avenue of cherry trees.

Tomoatsu Godai, whose proposal of 1864 to the leaders of the Satsuma clan led to the arrival in 1865 of the Satsuma students, returned to Japan to become a leading figure in establishing Osaka as a modern commercial centre. During the early Meiji period he was instrumental, amongst other things, in the establishment of the Foreign Settlement, the founding of the National Mint Bureau and Osaka Tax Office and later on in

setting up the Chamber of Commerce. He was also actively concerned in mining, as was Moriaki Asakura, who entered the Mines Bureau and was notable for introducing western technology.

Arinori Mori, one of the most distinguished members of the group, travelled to the USA, where he went so far as to publish a call for Japanese to be replaced by English as the national language. Subsequently, after returning to England as Japanese Minister, he became the Minister of Education, only to be assassinated in 1889 by an ultra-nationalist fanatic.

Kiyonari Yoshida, who pursued Dutch studies in the Kaiseijo College from which many of the students came, went on to study finance in the USA. He later became Under-Secretary of State in the Japanese Ministry of Finance, where he was responsible for raising international bonds and later, as Minister to the USA, for the revision of the unequal trade treaties with foreign powers. He was also the leading figure in the formation of the western style Stock Exchange which came into being two years after his death in 1891.

Others had distinguished Foreign Office and Diplomatic careers. Munenori Terashima played an instrumental part in founding the Foreign Ministry and became Secretary of State. Naonobu Sameshima was Minister to France and Hakuai Nakamura served in Russia, and was Resident Minister in Holland, Portugal and Denmark. The youngest of them all, at thirteen, and the most accomplished English speaker, Kanae Nagasawa, does not appear in the College records since he almost immediately left to enrol in a secondary school in Aberdeen. He then left Britain in 1867 to study in Cornell University and later to become an important and innovative wine producer in California.

Yoshinari Hatakeyama helped to reform the Japanese educational system and was the first Head of the Tokyo Kaisei College, which later became the University of Tokyo.

Hisanari Machida was the founder of the museum which later became the Tokyo Museum, and which was modelled on the Victoria and Albert Museum, and of which he became the Head in 1875, and Japan's first Director of Museums, before suddenly giving up all his public appointments to become Chief Priest of the Miidera Temple in Shiga Prefecture.



The five members of the Choshu clan who came to UCL in 1863.

Back row (left to right) Endo Kinsuke, Masaru Inoue*, Hirobumi Ito
Front row (left to right) Kaoru Inoue**, Yozo Yanao.

* Otherwise known as Bunta Inoue.

** Otherwise known as Nomura Yakichi.

Sixteen of the members of the Satsuma clan who came to UCL in 1865.



Back row (left to right) Moriaki Asakura, Shinshiro Machida, Naonobu Sameshima, Munenori Terashima, Kiyonari Yoshida
Front row (left to right) Seizo Machida, Hisanari Machida, Kanae Nagasawa.



Back row (left to right) Yoshinari Hatakeyama, Yaichi Takami, Hisanari Murahashi, Ainoshin Togo, Tokinari Nagoya
Front row (left to right) Arinori Mori, Junzo Matsumura, Hakuai Nakamura.

Junzo Matsumura, rose to high rank in the Navy, becoming head of the Japanese Naval Academy in 1877. Whilst Hisanari Murahashi, after distinguishing himself in the Imperial Army, served in the Yezo Land Development Office, introducing western agricultural technology to the area, before resigning in 1881 to become a Buddhist monk. Ainoshin Togo, on the other hand, was killed, at the age of twenty six, in the course of warfare during 1868.

Even from such a brief summary of salient points, the extraordinary contribution to the development of modern Japan made by the pioneers who came to UCL in 1863 and 1865 is very clear. These great men are also of considerable significance for the history of the College, since they stand at the head of a continuing process of action and interaction which was only briefly interrupted by the Second World War.

Ernest Satow, a UCL graduate who had been present as a Government representative at the bombardment of Kagoshima, and who was later received there on a mission of conciliation, may possibly have played some part in the encouragement of the first wave of students. He later became Minister Plenipotentiary in Tokyo, and it is after him that the first chair of Japanese Law in England, established at UCL in 1989, and now held by Professor Hiroshi Oda, previously of Tokyo University, has been named. A large part in the raising of funds for this important development was played by Ichiro Kato, an Honorary Fellow of UCL, who was himself President of Tokyo University (1969-73).

By the end of the Tokugawa Shogunate in 1868, a further seventeen Japanese students had come to study in the College. Among them was Dairoku Kikuchi who, in 1875, became the first Japanese to be awarded his London BA. He then went on to become the President of Tokyo University and Minister of Education. Another was Tadasu Hayashi, who was successively Minister to China and Russia, and Ambassador to Britain, was Minister of Communications and twice appointed Foreign Minister. They were followed by another sixteen in the early years of the Meiji Government. One of the latter was Tatsui Baba, who was a prominent campaigner for liberal ideals, freedom of speech among them.

Professor Williamson himself was consulted about the appointment of the first generation of University teachers in the Tokyo Kaisei College, this was one of the bodies which merged to form the modern Tokyo University. He was also involved in a similar way in advising the Imperial College of Engineering, founded in 1873 under the auspices of Yozo Yamao, the then Under-Secretary of State in the Ministry of Industries.

Robert Atkinson, who went from UCL in 1874 to become the first Professor of Chemistry in the Tokyo Kaisei College, subsequently occupied the first Chair in that subject in the University of Tokyo (1877-81).

The first Professor of Physics at the Imperial College was W E Ayrton, another UCL graduate. He was joined in 1877 by Josiah Conder who had been at the Slade School of Art at UCL (1872-76) and went out to Tokyo as Professor of Architecture and subsequently practiced as an architect in Japan until his death in 1920.

Among the most important of the students who studied under Atkinson in Tokyo was Joji Sakurai, who later came to UCL to do research under Alexander Williamson (1876-81). On his return to Japan, he was appointed to Atkinson's Chair in Chemistry and became President of the Imperial Academy, returning to UCL in 1937 to receive an Honorary Fellowship to add to his long list of National and International Honours.

The continuation of this tradition, re-established soon after the Second World War, is witnessed by the fact that in 1992 there were some sixty-five Japanese students studying at UCL and six members of staff. Furthermore, the foundation of the Chair of Japanese Law (1989) was followed in 1991 by the Hamamatsu Photonics KK Chair of Medical Photonics.

Most strikingly of all, however, the greatest single investment ever made to any British University was contributed by Eisai, a leading Japanese Pharmaceutical Company with growing world-wide interests. After considering a number of universities in Europe as well as in England, it was at UCL that Eisai decided to set up a major, inter-active

research institution. It is, indeed, in front of the Eisai London Research Laboratory, named after the UCL Nobel Prize winner, Professor Sir Bernard Katz, and opened on 11 May 1993 by the Princess Royal, Chancellor of the University of London, that the monument to the pioneers of 1863 and 1865 now stands.

The Design and Meaning of the Monument

The monument at UCL was unveiled, to the accompaniment of Gagaku music performed by the Chikushi Gakuso Ensemble, on 2 September 1993 by His Excellency Mr Hiroshi Kitamura, Ambassador of Japan. Its erection on a prime site in the centre of the College was made possible by the generosity of the Japan-British Culture Memorial Club and the Anglo-Japanese Friendship Society. The former Club, which is part of the UCL Japan Club, affiliated to the UCL Alumni Association, was likewise set up in 1992. The monument is the counterpart of that set up in 1981 in Kushikino City to record the departure of the Satsuma samurai for Britain in 1865.

The nineteen names on the Japanese monument are accompanied by a Waka written by Junzo Matsumura, one of the students, at the time of his departure. It reads:

How sweetly has this day for me
a glow as though of flowers
even in the shadows
along the coast of Hashima.

The inscription referring to the event is accompanied by a bronze low relief showing the moment of embarkation, it also relates to the larger monument in Kagoshima with its group of bronze figures in the round, which is illustrated on page 12. It reads:

It was first hand experience of the advanced state of western technology during the Bombardment of Kagoshima in 1863 that resolved the Satsuma clan to send an expedition of students overseas. In 1865, a party of fifteen students in the charge of Hisanobu Niijo and

Hisanari Machida, and led by Tomoatsu Godai and Koan Matsuki (Munenori Terashima), left secretly aboard a British ship from Hashima Bay here in Kushikino City.

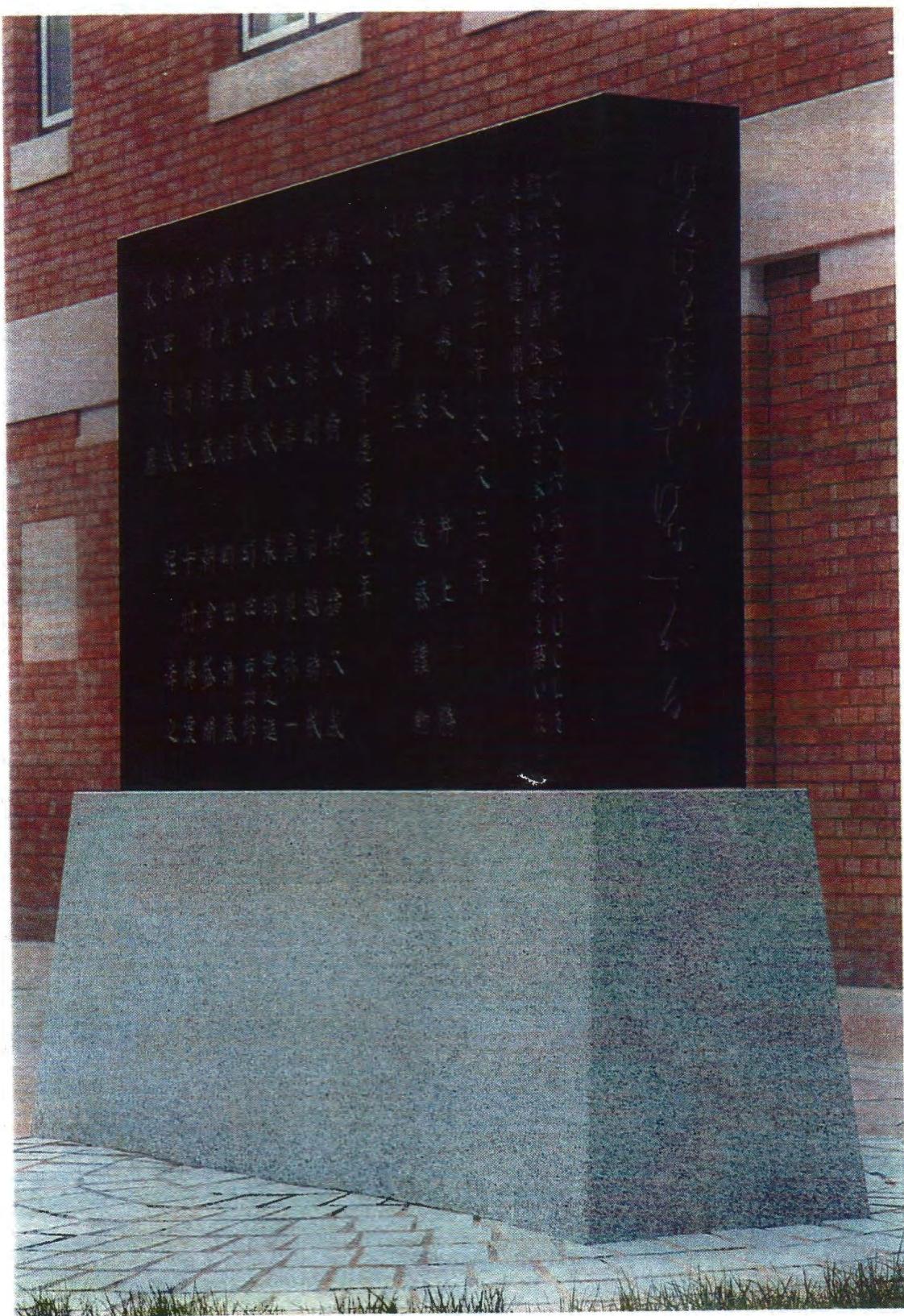
They went on to absorb western knowledge with a great sense of purpose and strength of spirit, returning to devote themselves to the progress of the Meiji Restoration and become a driving force in the modernisation of Japan. This monument has been founded to commemorate their pioneering achievement and in the hope of international friendship and understanding among our children.

March 1981

The message and the hopes embodied in this inscription are reinforced by the visual symbolism of the monument itself. The two black granite wings carrying inscriptions, and the speckled grey granite centre bearing the bronze relief, symbolise gates of darkness opening on a new dawn. The circle of granite setts, on which the monument stands, represents the circle of the wide world into which the pioneers were venturing with a mixture of hope and trepidation.

The UCL monument, in which the central theme is harmony between nations and cultures, likewise stands on the granite setts of the world circle. It too is composed of fine black granite, in this case from Zimbabwe, set on a base of speckled grey Portuguese granite known as Pedras Salgadas. The latter was chosen, not only to forge the link with the Japanese monument, but to echo the speckled grey granite of the Advanced Centre for Bio-Chemical Engineering which is beneath the garden in which the monument stands.

In the UCL monument, the counterpart to the symbolism of the Kushikino monument lies in its proportions. These are based, appropriately, on enduring concepts of proportional harmony in mathematics, in nature, and in the visual and musical arts, the origins of which go back at least as far as Ancient Greece.



The UCL Monument, unveiled on 2 September 1993.



The Kushikino City Monument, set up in 1981, to record the departure of the members of the Satsuma clan in Britain in 1865.



The reverse side of the UCL Monument.

The black granite rectangle, which carries inscriptions in Japanese and English, is based on the Golden Section, a geometrical proportion in which, if a line is divided in two parts, the smaller part is to the larger as the larger is to the whole. The Pythagoreans, are thought to be the founders of the study of the Golden Section, which is, amongst other things, a proportion basic to the pentagon. In the Renaissance, Luca Pacioli, in his *De Divina Proportione*, following Euclid, published the basic formula, and the theorists of the time believed it to be the secret of the Greek temples.

The Golden Section is the most economical of all proportions, as every proportion requires three terms and in its case the third term is the sum of the first two. Since it best represents the idea of unity in diversity, later theorists considered it to be the 'perfect' proportion.

In reality, the Golden Section only appears, seemingly incidentally, in the measurements of some Greek temples, such as the Parthenon in Athens. It appears much more often in works of art or architecture in which the makers were unaware of its theoretical existence than it does as a deliberate principle of design.

This might be thought to reduce the importance of the part played by the Golden Section in the history of western art and architecture. In fact it does the opposite. The reason is that it is a proportion which is continually approximated in nature itself. The distances between succeeding leaves of many plants and the sizes of the successive chambers in many shells are prime examples. Their measurements are directly related to a numerical sequence, known as the Fibonacci Series from its thirteenth century author Leonardo Fibonacci of Pisa, in which each successive digit is the sum of the previous two.

It is therefore likely that it is precisely its constant occurrence in nature, as well as the fact that in art it gives a dynamically balanced relationship between two parts of a line, or between the sides of a rectangle derived from them, that is an important factor in the frequent recurrence of the Golden Section in human art and artifacts, quite apart from its deliberate and continued use by theoreticians, artists and architects.

In the UCL monument, the Golden Section proportion is combined with a 15cm module which controls every measurement in the entire structure. The first eight consecutive digits of the Fibonacci Series (1.1.2.3.5.8.13.21) are all represented in the measurements of the monument and of the world circle on which it stands.

The dimensions of the monument likewise cover the proportional relationships handed down from ancient Greek music, namely the 1:2, 2:3, 3:4 of the diapason, the diapente and the diatesseron, which are the octave, fifth and fourth of modern musical terminology.

Harmony, as the resolution of conflict and the unity to which diversity contributes, is not, however, confined to the abstract world of the measurements of the monument and their visual outcome. It is explicitly embodied in the Japanese Haiku on the end face of the black granite block:

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Harubaru to
kokoro tsudoite
hana sakaru

In translation, this reads:

When distant minds
come together
cherries blossom

In poetic terms this is the essence of all that UCL stands for. It also, incidentally, calls to mind the cherry trees in the main quadrangle, presented to the College by the Housman Society of Japan.

It reflects the goal which the pioneering students of 1863 and 1865 strove to attain. It is also a reminder that this is not simply a monument to a past event, however momentous in itself, but something that, in commemorating the past, looks forward to the future.

It epitomises the fundamental beliefs which underlie the creative, intellectual goals to which UCL itself was committed from the day of its foundation; for which it still stands, and to which it intends to dedicate itself with ever-increasing vigour on into the twenty-first century and beyond.

Numerical Appendix

The Golden Section is such that if a line is divided into two parts, A and B, then A is to B as B is to A + B. In numerical terms this produces the proportion 1:1.618.

In the Fibonacci Series each successive digit is the sum of the previous two. It runs, in ascending order: 1.1.2.3.5.8.13.21 and so on, the ratio of one digit to the next growing ever closer to that of the Golden Section (13:21 + 1:1.615). These first eight digits of the Fibonacci Series are covered by the measurements of the monument.

The Diagram on p.* gives the dimensions of the monument in full. All of them are governed by the 15cm module (M). When the bracketed M is in bold type, it means that the measurement falls in the Fibonacci Series.

The relationship of the 15cm module (**M**) to the measurements of the monument is such that the 1:1 ratio at the start of the Fibonacci Series is embodied in the even 7.5cm (1/2M) depth of the upper surface of the grey granite plinth. This adds 15cm (**M**) to the depth and width of the main block.

In tabulated form the measurements are as follows:

Fibonacci Series Measurements:

1. Total additional width of upper surface of base in relation to inscribed block	15cm (1M)
2. Total additional depth of upper surface of base in relation to inscribed block	15cm (1M)
3. Depth of inscribed block	30cm (2M)
4. Depth of top of base	45cm (3M)
5. Height of base	75cm (5M)
6. Height of inscribed block	120.5cm (8M)+5mm
7. Width of inscribed block and approximate total height of monument	195cm (13M)
8. Diameter of world circle	315cm (21M)